

# The Federal Role in the Nation's Health

ELLIOT L. RICHARDSON

WITH THE EXCEPTION of a flurry of health activities during and after World War I, the Federal Government played a very limited role in family and community health until the thirties. During the First World War, for example, the Public Health Service was authorized to provide extra-cantonment sanitation activities and to inaugurate a venereal disease control program. And when the disastrous influenza pandemic hit the United States in 1918-19, Congress appropriated \$1 million to the Public Health Service to help suppress this disease.

In the postwar period Federal health activities languished. Then the great depression of the early thirties brought the Social Security Act, which prepared the way for wider Federal participation in public health activities. A substantial program of grants-in-aid to the States for general public health purposes was authorized. Later, specialized programs for tuberculosis and venereal disease control were added.

Despite these measures, the Federal investment in public health and medical research was quite meager until World War II. In 1940, for example, a year in which the Federal budget was \$6.2 billion, only \$3 million was spent for medical research and an additional \$19 million for all other health purposes, including grants to the States.

At the onset of World War II, with the mass tragedy of 1918's influenza pandemic far from forgotten, there emerged a realization of the

vital roles that individual and collective health could and would play in the national security. In the early days of World War II the Federal Government quickly recognized that a healthy citizenry was vital to winning the war and that bold approaches to the prevention and cure of disease must have stimulus as well as supplementary financial support.

In consequence, the now widely used cooperative approach to medical research was evolved by universities, foundations, industries, and government at local, State, and Federal levels—a pattern that deserves to flourish for a long time to come.

I need not recount the dramatic medical achievements that have resulted from this cooperative approach to research during the past decade and a half. Never before in history has there been such an extraordinary accumulation of new medical knowledge and such a swift advance in technical methods and skills for the application of that knowledge.

As a result, we now have in America a citizenry that is keenly interested in health and generally aware of what is available in medicine. The citizen, the consumer of the medical product, not only expects medical science to go forward at even a faster pace but also insists that the products, techniques, and skills that derive from current achievements be readily accessible to all who need them. Indeed, today the Federal Government is expected to be responsive, to a degree unknown in any former time, to inexorable demands for medical and public health services which no single group acting alone could ever provide and which all groups in concert can barely meet.

At almost every point in the spectrum which has at one end the development of new knowl-

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*Mr. Richardson, Assistant Secretary of Health, Education, and Welfare, delivered this address May 5, 1959, at the centennial meeting of the Kansas State Medical Society in Topeka, Kansas.*

edge in the health field and at the other the financing of medical care, the Federal Government has already assumed some degree of responsibility. That responsibility now includes participation with official and voluntary State and local agencies in the formulation of research policies in particular areas; the support of that research; aid to professional and technical education and training; assistance in the construction of new facilities and the renovation of old; help in the prevention and control of disease; consultation and funds to help institutions to effect the most fruitful utilization of scientific and teaching faculties; financial aid to improve and expand institutions devoted to research and treatment; and finally, cooperation in strengthening and complementing private and public systems of financing medical care.

We cannot, therefore—even if we were inclined to do so—start from scratch in attempting to frame legislation designed to strengthen the capacity of the Federal Government to assist in dealing with the health problems of today and tomorrow. As we see it, our function is to take such additional action as may be necessary in a manner that will so far as possible preserve and strengthen the pattern of Federal, State, local, and private cooperation that has worked so well in the past. My aim will thus be to show how we in the Department of Health, Education, and Welfare are attempting to apply this approach to the problems in the field of health that seem to us most urgent. In so doing, I shall start with medical research, proceed from there to the needs of medical schools and related teaching institutions, describe our present thinking with regard to medical care facilities, and conclude by touching briefly on the financing of medical care.

### **Medical Research**

Amid all the vast array of urgently needed health, education, and welfare activities, medical research today occupies a favored position. It is the only one of which the sole question asked is, How much can usefully be spent? Although expenditures for medical research still represent only about 4 percent of the Nation's total investment in research and development, such expenditures have more than doubled in

the last 5 years. The Federal Government's share, meanwhile, has gone up by almost 300 percent.

This phenomenal growth in the support of medical science has, of course, been fed by the very achievements of medical science. Each new discovery reinforces the public demand for still faster progress in the conquest of the cripples and killers that are mankind's most ancient enemies. The consequences, however, for medical education and for the private agencies and organizations actively concerned with medical research, as well as for Government, are so significant and far-reaching as to cry out for careful study and evaluation. To make such a study, former Secretary of Health, Education, and Welfare Marion B. Folsom in 1957 appointed a committee of distinguished consultants under the chairmanship of Dr. Stanhope Bayne-Jones, formerly dean of the Yale University School of Medicine and technical director of research, Office of the Surgeon General of the Army. The committee presented its report, now generally referred to as the Bayne-Jones Report, in June 1958.

Over the past 4 months Secretary Flemming has devoted considerable time with the Surgeon General of the Public Health Service and the director of the National Institutes of Health, Public Health Service, and their staffs, to studying the full implications of this report. He has also reviewed the data obtained from a supplementary study of 20 medical schools conducted by the National Institutes of Health.

On the basis of these data it has been possible to project the probable rate of growth in expenditures for medical research and to formulate as a long-range national goal for such research a total annual expenditure of \$1 billion by 1967. We assume, as a guide for national action, that the support of medical research should continue to be divided almost equally between Federal and non-Federal sources. It is expected, moreover, that the present pattern of support within the Federal Government will be generally maintained, with the National Institutes of Health providing most of the Federal share. This would mean an increase in National Institutes of Health expenditures for research from \$209 million in fiscal 1959 to an annual rate of about \$350 million by 1967.

Apart from their significance in establishing long-range goals, these studies have reinforced our firm belief that research, education, and training are inherently inseparable and that a successful research and training effort for the Nation as a whole must be securely grounded upon a sound educational base. For this reason we are more concerned than ever about the urgency of immediate steps to correct the imbalance between medical research and education that has tended to result from the very magnitude of Federal research expenditures.

Our analysis has, for example, confirmed the view that the National Institutes of Health should pay not only the direct costs of any research project which they support but should also pay whatever share of indirect costs, such as administrative salaries, heat, light and power, and maintenance of buildings, is fairly attributable to that project. Until this is done, each new project undertaken by a medical school will result in an additional drain on its operating funds, thereby weakening its capacity to carry out its teaching mission. Similarly, hospital care will suffer from the diversion of uncommitted income to the support of research. We propose, therefore, at the earliest opportunity, to renew the fight to eliminate the limitation on the payment of indirect costs which for a number of years has been contained in our appropriations acts.

A related problem concerns the very considerable number of medical school and hospital personnel whose salaries are being paid in full or in part out of research grant funds. Under existing law no assurance can be given that such funds will continue to be provided in predictable amounts. The result is that no security of tenure and no firm career ladder in medical research can be offered to the men and women engaged in such projects.

To remedy this and at the same time to make possible a degree of flexibility in the allocation of research funds with a minimum of red tape, we have under consideration recommendations for legislation that would authorize the allotment to the research institution of a percentage of total research appropriations on an "institutional grant" basis. To the extent, in other words, of say 15 percent of such appropriations, we would make allotments among re-

search institutions in a manner that would not require specific project applications and that would enable them to utilize the funds for the continuing work of their senior investigators.

### **Grants for Professional Training**

In conjunction with its projection of future expenditures for medical research, the Bayne-Jones Report warned that the present shortages of professional and technical manpower are likely to grow even more critical as research demands increase. Larger numbers of well-trained professional people are going to be needed not only to conduct the search for new knowledge but to bring this knowledge to our rapidly expanding population in the form of better medical care. Speaking to the latter point, the Bayne-Jones group predicted, "A minimum of 14 or as many as 20 new medical schools will have to be built (by 1970) if the existing number of physicians per 100,000 population is not to fall."

The Public Health Service, with the help of a new advisory group headed by Frank Bane, former executive director of the Council of State Governments, is now systematically studying the whole question of the need for physicians and exploring the ways in which this need may be met. This study, together with the National Institutes of Health study of 20 medical schools and the Bayne-Jones Report, should provide a strong basis on which to develop national goals for medical education and research.

The Federal Government, meanwhile, is already making significant contributions toward the reduction of manpower shortages in the health field. The National Institutes of Health of the Public Health Service, for example, will spend in 1959 more than \$60 million in stipends for individuals preparing for careers in medical research, for the support of traineeships for persons intending to become specialists in one of the fields covered by a categorical institute, in grants to teaching institutions for the support of training courses, and for research fellowships. In addition, the Public Health Service is spending \$57 million for training in water pollution control activities, advanced nursing, and other public health responsibilities.

## **Assistance to Research and Training Institutions**

All these programs—research grants, traineeships, fellowships, even training grants—amount in effect, so far as the research or teaching institution is concerned, to payments for the purchase or reimbursement of services. To the extent that such payments are applied to activities that the institution would in any case feel bound to undertake—and certainly a medical school would be obliged to support a certain amount of research even if no Federal grant program existed—they can of course be regarded as aid to the institution. Yet it is equally clear that the research and research-related training programs now being carried out are much larger in volume and different in character than they would be if Federal funds were not available. Indeed, the programs would not be serving their purposes if this were not the case, for they were not designed primarily for the assistance of institutions. Frequently, in fact, as I have tried to make clear in discussing the need for the full payment of indirect costs and for institutional grants, the programs operate as burdens on the institution.

We cannot escape, therefore, the obligation to face squarely the need for more direct forms of Federal assistance to health training and research institutions. For medical schools, dental schools, and schools of public health, particularly, this need is becoming increasingly acute. As President Eisenhower stated in addressing the National Fund for Medical Education a year and a half ago:

The rapid accumulation of new medical knowledge is flooding in like a tide in the Bay of Fundy. There is on all sides a mounting demand for health services by our communities. Under these demands, the medical schools in America today face inherited responsibilities beyond what they are financially able to meet. The medical progress of which we are so justly proud has involved these teaching institutions in a struggle for solvency and survival.

The constantly widening scope and complexity of medical education has, within the space of a few decades, quadrupled the cost of producing a qualified doctor. Tuition now pays but one-fifth of the student's total education cost.

Accordingly, there is—today—a great gap to close; the gap between the ceiling of medical school receipts from all sources and the racing increase in costs of teaching, research, and medical care.

Under present law the only Federal program

that provides direct help to medical schools and kindred institutions is the program of matching funds for the construction of research facilities. First enacted in 1956 and extended in 1958 until 1961, this program authorizes expenditures up to \$30 million a year for buildings used in the actual conduct of research, or for that part of a building to be devoted to research, but not for buildings or parts of buildings used for teaching or administration. Although authority to make grants for the latter purpose has been advocated by the Administration in each of the last 3 years, Congress has not yet seen fit to grant it. Budgetary considerations permitting, we shall probably try again. Next time, however, we may modify our earlier proposals by suggesting that grants be restricted to buildings needed in order to expand enrollments or to prevent their reduction.

So far as outright Federal grants for operating purposes are concerned, the only beneficiaries at the present time are the 11 schools of public health. In recognition of the fact that most of their graduates enter public service, Congress passed a bill in 1958 authorizing grants to these schools in an aggregate amount of \$1 million a year. The act was limited to 2 years in duration and therefore expires in 1960. Assuming that it is to be extended, should it be confined to the schools of public health, be modified so as to restrict it to the support of special projects in public health training, or be expanded to include other types of teaching institutions in the health field? Should its significance as a precedent, in other words, be ignored, brought more nearly into line with the National Institutes of Health training grant programs, or extended? Most of us in the Department of Health, Education, and Welfare, especially those of us who have been wrestling with the needs of higher education as a whole, would hesitate long before recommending simple extension.

## **Aid to Institutions Providing Patient Care**

New weapons in the war against disease and training in their use are of little avail if we lack the facilities in which to employ them in caring for the sick. So great has been the need for such facilities, first as a result of the

wartime deferment of construction and now because of the population boom, that the Federal Government has for more than 10 years been playing a major part in a nationwide cooperative program designed to meet this need. The Hill-Burton Act, which created the hospital survey and construction program in 1948, has been a tremendous success, particularly in building general hospitals. And yet most of the gain in new beds has been offset by increases in population, by obsolescence, and by the abandonment of old facilities as new facilities are constructed. Like Alice and the Red Queen, we have had to run like blazes to stay in the same place.

Eleven years ago we had about 60 percent of the general hospital beds we needed. Today, with the help of almost \$1 billion in Federal funds and more than \$2 billion in State, local, and private matching funds, 75 percent of the need for general hospital beds has been met. In addition, we now have 73 percent of the tuberculosis beds needed, as compared with 46 percent in 1948. In mental hospital beds we have slipped from 55 percent of the need in 1948 to 53 percent today. All in all, State plans show a remaining deficit of 888,000 hospital beds of all types and 323,000 nursing home beds.

An equally pressing problem has been the rapid upward spiral in the costs of hospital care, more than 179 percent in a decade. The search for means of combating this rise has been a central purpose in the allocation of research and demonstration project funds—\$1,200,000 annually—under the Hill-Burton program. In our view, the results of experimentation in “progressive patient care” are particularly promising. This is a pattern of services making use both of physical facilities and of medical and nursing personnel in the manner best suited to the needs of the individual patient. It includes intensive care for critically ill patients, intermediate care for those requiring a moderate amount of service, self-care in a hotel type of setting for ambulatory patients, and long-term care for the chronically ill in a homelike atmosphere with periodic evaluation of progress and rehabilitation.

Concern with the high cost of hospitalization

also underlies much of our recent thinking with respect to improvements in the Hill-Burton program. In this connection we are laying particular stress on finding ways and means of making the diagnostic and treatment center category of the program more useful. As the Hill-Burton Act now stands, we can make grants for the construction of such centers only where the center is formally affiliated with a hospital. Although we have considered asking for the complete elimination of this requirement, our present view is that it should be removed only for mental health clinics and diagnostic and treatment centers in remote areas.

The limitations of the Hill-Burton Act, however, are not the major barrier to the construction of more facilities for outpatient services. More important is the lack of readily available insurance against the cost of out-of-hospital care and treatment. It is heartening, therefore, that the health insurance industry has this problem under intensive study and has already taken a number of experimental steps toward providing such insurance. In addition to major medical expense insurance, which from its inception has been applicable to the costs of medical care wherever it may be provided, many insurance companies as well as Blue Shield plans now offer coverage against the costs of physicians' services in the home or office. In the meanwhile, we are continuing to search for ways of encouraging faster progress in this direction.

So far as facilities for acute care are concerned, the principal contribution of the Hill-Burton program has been toward the construction of new hospitals. Rural communities altogether lacking in hospital beds have been the chief beneficiaries. Needed in addition, however, is some form of assistance in financing the cost of repair and modernization of existing hospitals in urban areas. Several approaches to meeting this need are possible: earmarked grants, direct low-interest loans, mortgage insurance, or some combination of the three. These approaches are all under study in the Department. In addition, we believe that we should continue to emphasize the importance of experimentation in measures designed to reduce the cost of hospitalization. For this purpose we are considering the merits of expand-

ing the research and demonstration authority of the Hill-Burton program so as to provide for direct grants—grants, in other words, not included in State allotments—for the building of experimental structures.

One other amendment to the Hill-Burton program that we expect to propose is motivated both by the aim of avoiding unnecessary hospitalization in high-cost institutions and by awareness of the continuing increase in the number of the aged. This amendment would consolidate the chronic-disease hospital and nursing-home categories of the program into a new “long-term care facilities” category and increase the authorized appropriations for this category. For similar reasons we also support the provision in the pending housing bill of mortgage insurance for proprietary nursing-home construction, with assurance through State licensing agencies of adequate standards of care.

#### **Disease Prevention Programs**

Disease prevention programs are fundamental activities of the Public Health Service in cooperation with State and local health departments. Although the acute communicable diseases have declined in prevalence, keeping them under control requires unrelenting vigilance. Yet the very success of public health techniques in curbing the acute contagions has been accompanied by a steady rise in the chronic diseases, especially those of the heart and arteries, cancer, diabetes, and the debilitating disorders peculiar to old age. Research and epidemiological investigations into their causes, incidence, and cure are being conducted on a wide scale. So far as prevention is concerned, the greatest unmet need is in health education. Our efforts in this direction need intensification, and, if possible, the application of more vigor and imagination.

High priority among preventive health activities must also be given to the problem of maintaining a healthful physical environment. Modern technology, urban growth, and industrialization are daily making this problem more acute. Water pollution, waste disposal, food and drug contamination, smoke and smog, and nuclear fallout present hazards to health

whose seriousness is not yet fully known. Radiation hazards in particular demand a comprehensive approach, and the Budget Bureau now has under study the relative responsibilities of the Public Health Service and the Atomic Energy Commission in this field. In addition, we in the Department of Health, Education, and Welfare are considering the possible need for some form of assistance to the States in the exercise of their radiological health responsibilities.

#### **Financing the Costs of Medical Care**

Even after new knowledge has been won, doctors have been trained, facilities have been built, and everything possible has been done to prevent disease, there remains the problem of paying for medical care. Although we have reached new heights of prosperity in the United States, medical costs represent a serious problem to many American families. In 1957, for example, about half of all the families in this country had incomes below \$5,000 and one family in seven had an income below \$2,000. As many as one-quarter of all American families today have no cash savings, and in 1958 it was estimated that more than half of our families had savings of less than \$500. For these people the costs of long-term and other disabling illness can be a crushing burden, particularly if the victim is the breadwinner.

For most people voluntary health insurance represents the best means of meeting the costs of medical care. Preliminary estimates for December 1958 show that just over 121 million people, or 70 percent of the population, then had some form of hospital insurance. Ten years earlier, in December 1947, the 53 million persons with such protection represented 37 percent of the total population.

There are, however, serious gaps in coverage of our older citizens, less than half of whom have any kind of health insurance. Summarizing an intensive study of this subject for the House Committee on Ways and Means, the Department of Health, Education, and Welfare last month reported:

There is general agreement that a problem does exist. The rising cost of medical care, and particularly of hospital care, over the past decade has been felt by persons of all ages. Older persons have larger than

average medical care needs. As a group they use about two and a half times as much general hospital care as the average for persons under age 65, and they have special need for long-term institutional care. Their incomes are generally considerably lower than those of the rest of the population, and in many cases are either fixed or declining in amount. They have less opportunity than employed persons to spread the cost burden through health insurance. A larger proportion of the aged than of other persons must turn to public assistance for payment of their medical bills or rely on "free" care from hospitals and physicians. Because both the number and proportion of older persons in the population are increasing, a satisfactory solution to the problem of paying for adequate medical care for the aged will become more rather than less important.

In our society the existence of a problem does not necessarily indicate that action by the Federal Government is desirable. The basic question is: Should the Federal Government at this time undertake a new program to help pay the costs of hospital or medical care for the aged, or should it wait and see how effectively private health insurance can be expanded to provide the needed protection for older persons?

The report itself does not attempt to answer this question, although it sets forth the arguments on both sides. Building on the data contained in the report, we are now trying to develop an answer. It is not an easy task, and I would not venture to predict where we will come out. One thing, however, is sure: before reaching any final conclusion we will seek opportunities for consultation with representatives of the medical profession and other interested groups. This approach has helped to solve many health problems in the past, and we are confident that it will lead us to a sound solution of this one also.

As the President has eloquently declared:

A healthy citizenry is the first defense line of the Republic. A healthy citizenry is capable, in peacetime, of expanding our economy; in times of critical tension, of carrying on without cracking or growing hysterical; in times of conflict, of showing the endurance and stamina upon which victories are built.

## Salaries of Local Public Health Workers

Salaries of local public health workers continued to increase between 1954 and 1958, but at a progressively lower rate than in the previous 2 years, according to the latest survey. The study, the sixth since 1948, was sponsored by the Public Health Service, the American Public Health Association, the Association of State and Territorial Health Officers, and the National League for Nursing.

Except for dentists and some sanitation personnel, the increase in median salaries from 1954 to 1958 ranged from 13 percent to 24 percent in local health units serving populations of 50,000 to 249,999.

The highest rate of increase for 6 of the 12 occupational groups studied—local health officers (medical), sanitary engineers, other sanitation personnel, professional laboratory workers, clinic nurses, and staff public health nurses—was in health units serving popula-

tions of 250,000 to 499,999. For the other six groups—other public health physicians, dentists, sanitarians, veterinarians, health educators, and supervising public health nurses—the highest rate of increase was in units serving populations of 500,000 and over.

The rates of salary increases were less uniform in the largest health units than in the smallest.

Data for 10-year comparisons are available for units in the 50,000-to-249,999 population class. Since 1948, the greatest increase, 74 percent, has been for local health officers and the next greatest, 73 percent, for sanitary engineers. No decrease was recorded for any category of public health workers.

Data are reported in "Salaries of Local Public Health Workers, August 1958," Public Health Service Publication No. 656. (See announcement of publication on p. 752.)



### **Snail Inhibitor**

Evidence that the algae characeae inhibit the snail host (*Australorbis glabratus*) of schistosomiasis was reported in Brazil, where an estimated 6 million persons are parasitized. Lair Remusat Rennó, professor of botany of the University of Minas Gerais, stated that during 6 years of research, the snails have not been observed in water courses containing the algae characeae (*Chara vulgaris*). After the algae were seeded in heavily infested areas, the snails disappeared within a short time. Research is underway to isolate the property which repels snails.

The findings were reported at the third national seminar of sanitary engineering professors, sponsored by the Ministry of Education, the University of Minas Gerais, Serviço Especial de Saúde Pública, and the U.S. Operations Mission in Brazil, at Belo Horizonte in July 1958.

—E. ROSS JENNEY, M.D., *chief, Health and Sanitation Division, U.S. Operations Mission, Brazil.*

### **The Early Rains**

Last October severe regional outbreaks of malaria occurred in Ethiopia in areas with elevations of 5,000 to 6,500 feet. We received a warning early in June when a malaria survey in the Bahar Dar area, which has an elevation of 6,000 feet, revealed an exceptionally high prevalence of malaria in many villages which ordinarily would be free of the disease until much later in the season. Unusually early rains there had produced large populations of *Anopheles gambiae*.

Checks in some of the epidemic areas showed infections almost exclusively with *Plasmodium falciparum*.

The severity of the epidemics so alarmed some local officials and provincial governors that they appealed to the Emperor for drugs, insecticides, and

medical personnel. Anti-epidemic teams were organized by the Ministry of Health and dispatched to the stricken areas.

—ROBERT D. SHANNON, *acting chief, Health and Sanitation Division, U.S. Operations Mission, Ethiopia.*

### **Practical Nurses**

The new 8-month course for nurse assistants, needed to relieve the shortage of nurses in Vietnam, will be well attended. Two thousand applied for the 60 openings for students in Saigon and 400 for the 40 vacancies in Hue. Half the students selected for the first course were men and half were women. They will wear a blue and white uniform during their training.

We hope that this course, which is similar to the training for practical nurses in the United States, and the new 3-year course for professional nurses will help standardize the classification of this profession into 2 clear-cut groups instead of the present 30 vague and overlapping categories.

—WILLARD H. BOYNTON, M.D., *chief, Health and Sanitation Division, U.S. Operations Mission, Vietnam.*

### **Milk and Water**

On a visit to an isolated Arawak village, a center for some 500 Amer-Indians living in this area of Surinam, we examined practically all of the infants and toddlers and the 30 school children. Their nutritional status was relatively good because of the powdered milk they receive from UNICEF. Inflammation of the eyes was the only easily recognizable affliction of high prevalence. We were not sure what percentage was trachoma and what follicular conjunctivitis, as both appeared to be present.

The Amer-Indians frequently asked for more ophthalmic ointment for their eyes, but rarely, however, as we toured the area, did anyone mention that the community needed a well. Daily the small children carry to their homes a few buckets of water from a creek 1½ kilometers distant, the nearest year-round source.

—HILDRUS A. POINDEXTER, M.D., *former chief public health physician, U.S. Operations Mission, Surinam.*